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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,744	11/28/2001	Ryo Yamasaki	35.C15971	8348
5514	7590	12/15/2005		
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112				

EXAMINER
AGGARWAL, YOGESH K

ART UNIT	PAPER NUMBER
2615	

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/994,744	Applicant(s) YAMASAKI, RYO	
	Examiner Yogesh K. Aggarwal	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 5-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 4 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al. (US Patent # 6,927,792) in view of Ochi (US Patent # 4,441,123).

[Claim 1]

Mimura et al. teaches an image pickup apparatus (figure 1) comprising an output unit (combination of lens 1, iris 2 and optical system 3 is read as an output unit) which outputs a first electric signal (e.g. signal corresponding to image sensor 4r corresponding to prism 3r) corresponding to a first light flux (red color) included in light fluxes (red, green and blue) from different areas of an exit pupil (e.g. different areas of an exit pupil correspond to prism 3r emitting red and prism 3b emitting blue) of an imaging optical system (combination of prisms 3r, 3g, 3b), and a second electric signal (e.g. signal corresponding to image sensor 4g corresponding to prism 3g) corresponding to a second light flux (green) different from the first light flux (red), included in the light fluxes (red, green and blue).

Mimura fails to teach a plurality of pixel units each including a first sensitive area for outputting the first electric signal and a second sensitive area for outputting the second electric

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signal wherein the first sensitive area and the second sensitive area overlap each other. However Ochi teaches a plurality of pixel units (figures 4 and 5 show red, green and blue pixels. A pixel unit is read as at least one pixel in a horizontal and vertical direction) each pixel unit has a first sensitive area outputting the first electric signal (e.g. red pixel outputting a first electric signal corresponding to red color) and a second sensitive area for outputting the second electric signal (e.g. green pixel outputting a second electric signal corresponding to green color) wherein the areas corresponding to red and green pixels in adjacent columns overlap (col. 3 line 58-col. 4 line 2) in order to reduce the moiré fringes.

Therefore taking the combined teachings of Mimura and Ochi, it would be obvious to one skilled in the art at the time of the invention to have been motivated to have pixel units each including a first sensitive area for outputting the first electric signal and a second sensitive area for outputting the second electric signal wherein the first sensitive area and the second sensitive area overlap each other in order to reduce the moiré fringes as taught by Ochi (col. 3 line 58-col. 4 line 2).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mimura et al. (US Patent # 6,927,792), Ochi (US Patent # 4,441,123) and in further view of Wu et al. (US Patent # 5,760,852).

[Claim 4]

Mimura in view of Ochi teach the limitations of claim 1 but fails to teach wherein the sensitivity region is formed on the basis of an F-number of the imaging optical system of a focus detection mode. However Wu et al. teaches that sensitivity of the CCD array (It is noted that the first and second sensitive areas of a pixel unit are included in a CCD array) can be adjusted by controlling

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electronic gain and the f-number of the objective lens (col. 7 lines 22-24). A focus detection mode would be inherently taught.

Therefore taking the combined teachings of Mimura, Ochi and Wu, it would have been obvious to one skilled in the art at the time of the invention to have been motivated to have sensitivity region formed on the basis of an F-number of the imaging optical system of a focus detection mode in order to have a device that can be used in a wide variety of lighting conditions.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh K. Aggarwal whose telephone number is (571) 272-7360. The examiner can normally be reached on M-F 9:00AM-5:30PM.

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6. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Ometz can be reached on (571)-272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

YKA

December 7, 2005

A handwritten signature in black ink, appearing to read 'David Ometz', with a long horizontal line extending to the right.

DAVID OMETZ
SUPERVISORY PATENT EXAMINER